## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE HONORABLE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of

Timothy J. Fuller et al.

Application No.: 10/808,679

Filed: March 25, 2004

Title: POLYMER PROCESSES

Examiner: Amanda C. Walke

Docket No.: A1258-US-NP

XERZ 2 00797

## APPELLANTS' REPLY BRIEF UNDER 37 CFR 41.41

Appeal from Group 1752

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## **CERTIFICATE OF TRANSMISSION**

I certify that Appellants' Reply Brief Under 37 CFR 41.41 is being filed on the date indicated below by electronic transmission with
the United States Patent and Trademark Office via the electronic filing system (EFS Web).

November 27, 2007

Date

Name: Laurie A. Boylan

This Reply Brief is submitted in response to the Examiner's Answer mailed September 28, 2007.

The claims are rejected on the three following grounds:

- 1. the combination of Fuller and Deubzer;
- 2. the combination of Fuller and Pinschmidt, Jr.; and
- 3. the combination of Fuller and Sato.

Appellants first address the Examiner's motivation for combining and/or modifying the references. On pages 11 and 12 of the Examiner's Answer, the motivation is the same for all three grounds of rejection. According to the Examiner, all of the claimed elements were known in the prior art, one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results. The Examiner cites *KSR Intl. Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007) in support of this statement.

The *KSR* decision cannot be construed as supporting the Examiner's position.

As *KSR* itself stated:

a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art... it can be important to identify a reason... to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

*Id.* at 1396. The Examiner's motivation does not identify a reason, but instead relies on a "could have combined" reasoning. This is not supported by *KSR*.

On this point, the rejected claims require a reaction mixture that comprises a basic catalyst with a pyridine solvent. Fuller discloses an acidic catalyst. The Examiner has not articulated what reasoning supports switching from an acidic catalyst to a basic catalyst. In addition, as to the first ground of rejection, the Examiner has not explained why one of ordinary skill, looking for a basic catalyst to catalyze a reaction that forms poly(vinylbenzyl alcohol) as a product, would look to Deubzer, who does not form poly(vinylbenzyl alcohol). As to the second ground of rejection, the Examiner has not explained why one of ordinary skill would ignore the disclosures of Fuller and Pinschmidt, Jr. that recommend the use of an acid catalyst. These explanations are necessary to sustain all three grounds of rejection.

The U.S. Supreme Court also reiterated the principle that when the prior art teaches away from the combination of known elements, discovery of a successful means of combining them is more likely to be nonobvious. *Id.* at 1395. The Examiner has not responded to Appellants' arguments in this regard.

As to the combination of Fuller and Deubzer, Appellants have consistently noted that Deubzer explicitly teaches that his basic catalysts cannot be used with the water-miscible solvents of Fuller. On page 10 of the Examiner's Answer, the Examiner appears to have misunderstood Appellants' argument as applying only to water, pointing to Example 3, which uses tetrahydrofuran. However, the argument applies to all water-miscible solvents. As tetrahydrofuran is water-miscible, the teaching-away argument stands.

As to the combination of Fuller and Sato, Appellants have consistently argued that Sato teaches the use of pyridine as a catalyst and this fact teaches away from the

Application Serial No. 10/808,679

use of pyridine in the instant reaction to prevent undesired side reactions from

occurring. Again, the Examiner has not responded to this argument.

**CONCLUSION** 

For at least the reasons discussed above, it is respectfully submitted that the

rejections are in error and that claims 1, 5-16, and 20-32 are in condition for allowance.

Appellants respectfully request this Honorable Board to reverse the rejections of the

claims.

Respectfully submitted,

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4